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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,115	06/27/2001	Geoffrey Huang	CISCP204	7433

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EXAMINER	
CERVETTI, DAVID GARCIA	

ART UNIT	PAPER NUMBER
2136	

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/894,115	HUANG ET AL.	
	Examiner	Art Unit	
	David G. Cervetti	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 January 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's arguments filed May 19, 2005, have been fully considered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 6, 14, 34, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mann et al. (US Patent Number: 5,167,035), and further in view of Takama et al. (US Patent Number: 5,572,518).

Regarding claim 1, Mann et al. teach a method for generating a control message to be transmitted from a first network device to a second network device in a data network, the control message relating to an action to be performed at the second network device, the method comprising: determining a first control message to be generated (column 1, lines 35-55); and generating the first control message (column 1, lines 35-55). The structure of the message of Mann et al. as disclosed in figure 6B shows a message with multiple status flags (column 12-14). Mann et al. do not disclose expressly identifying reason information relating to at least one reason for generating the first control message; and generating the first control message, wherein the first control message includes explicit reason information relating to the identified at least one reason for generating the control message. However, Takama et al. teach a reason indication parameter added to control messages (figure 12, column 6, lines 40-67,

column 7, lines 35-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a reason information in the control message sent by Mann et al. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to send multiple pieces of data associated with control messages over a network.

Regarding claim 6, the combination of Mann et al. and Takama et al. teaches the limitations as set forth under claim 1 above. Furthermore, Mann, et al. teach transmitting the first control message to the second network device (column 3, lines 36-43) to thereby cause the second network device to implement an appropriate action in response to the first control message (column 2, lines 61-68).

Regarding claim 14, Mann et al. teach a computer program product for generating a control message to be transmitted from a first network device to a second network device in a data network, the control message relating to an action to be performed at the second network device, the computer program product comprising: a computer usable medium having computer readable code embodied therein, the computer readable code comprising (column 5, lines 16-29): computer code for determining a first control message to be generated (column 1, lines 35-55); and computer code for generating the first control message (column 1, lines 35-55). The structure of the message of Mann et al. as disclosed in figure 6B shows a message with multiple status flags (column 12-14). Mann et al. do not disclose expressly computer code for identifying reason information relating to at least one reason for generating the first control message; and computer code for generating the first control message,

wherein the first control message includes explicit reason information relating to the identified at least one reason for generating the control message. However, Takama et al. teach a reason indication parameter added to control messages (figure 12, column 6, lines 40-67, column 7, lines 35-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a reason information in the control message sent by Mann et al. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to send multiple pieces of data associated with control messages over a network.

Regarding claim 34, Mann et al. teach a system for generating a control message to be transmitted to a network device in a data network, the control message relating to an action to be performed at the network device, the system comprising: at least one CPU (column 2, lines 34-38); memory (column 2, lines 34-38); and at least one interface for communicating with the network device (figure 2, number 19); the system being configured or designed to determine a first control message to be generated (column 1, lines 35-55); and the system being further configured or designed to generate the first control message (column 1, lines 35-55). The structure of the message of Mann et al. as disclosed in figure 6B shows a message with multiple status flags (column 12-14). Mann et al. do not disclose expressly the system being further configured or designed to identify reason information relating to at least one reason for generating the first control message; and the system being further configured or designed to generate the first control message, wherein the first control message includes explicit reason information relating to the identified at least one reason for

generating the control message. However, Takama et al. teach a reason indication parameter added to control messages (figure 12, column 6, lines 40-67, column 7, lines 35-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a reason information in the control message sent by Mann et al. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to send multiple pieces of data associated with control messages over a network.

Regarding claim 39, the combination of Mann et al. and Takama et al. teaches the limitations as set forth under claim 34 above. Furthermore, Mann, et al. teach a system configured or designed to transmit the first control message to a second network device (column 3, lines 36-43) to thereby cause the second network device to implement an appropriate action in response to the first control message (column 2, lines 61-68).

4. Claims 7, 12-13, 19, 24-26, 31-33, 40, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takama et al., and further in view of Mann et al.

Regarding claim 7, Takama et al. teach a method for communicating between nodes in a network, the method comprising: receiving a first control message from a first node, the control message including explicit reason information relating to at least one reason for the generation of the first control message (figure 12, column 6, lines 40-67, column 7, lines 1-60); identifying the reason information (figure 12, column 6, lines 40-

67, column 7, lines 1-60); determining an appropriate response to the first control message using at least said reason information (figure 12, column 6, lines 40-67, column 7, lines 1-60); and implementing said appropriate response (figure 12, column 6, lines 40-67, column 7, lines 1-60). Takama et al. do not expressly disclose communicating between nodes in a data network. However, Mann et al. teach communicating between nodes in a data network (columns 1-2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the method of Takama et al. in a data network. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to send control messages over a data network.

Regarding claim 12, the combination of Takama et al. and Mann et al. teach the limitations as set forth under claim 7 above. Furthermore, Takama et al. teach implementing a first response to the first control message if the reason information includes a first reason code (figure 12, column 6, lines 40-67, column 7, lines 1-60). Takama et al. do not disclose expressly implementing a second response to the control message if the reason information includes a second reason code. Mann et al. teach control messages including multiple flags (column 13, lines 1-17 and 53-61, column 15, lines 8-22, figure 6B, number 103, figures 6E and 6F), which a person of ordinary skill in the art could have used as "reason information". Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include more than one reason information on the control messages of Takama et al. One of ordinary skill in the art would have been motivated to do so because it was well known in the art

to send control messages including multiple parameters or flags over a data network and to use functions using multiple parameters to execute commands.

Regarding claim 13, the combination of Takama et al. and Mann et al. teach the limitations as set forth under claim 7 above. Furthermore, Mann et al. teach wherein the control message relates to an action to be performed at a network device receiving the control message (column 2, lines 61-68).

Regarding claim 19, Takama et al. teach a computer program product for communicating between nodes in a network, the computer program product comprising: a computer usable medium having computer readable code embodied therein, the computer readable code comprising (column 4): computer code for receiving a first control message from a first node, the control message including explicit reason information relating to at least one reason for the generation of the first control message (figure 12, column 6, lines 40-67, column 7, lines 1-60); computer code for identifying the reason information (figure 12, column 6, lines 40-67, column 7, lines 1-60); computer code for determining an appropriate response to the first control message using at least said reason information (figure 12, column 6, lines 40-67, column 7, lines 1-60); and computer code for implementing said appropriate response (figure 12, column 6, lines 40-67, column 7, lines 1-60). Takama et al. do not expressly disclose communicating between nodes in a data network. However, Mann et al. teach communicating between nodes in a data network (columns 1-2) and a computer program product for communicating between nodes in a data network (column 5, lines 16-29). Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to use the method of Takama et al. in a data network. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to send control messages over a data network.

Regarding claim 24, the combination of Takama et al. and Mann et al. teach the limitations as set forth under claim 19 above. Furthermore, Takama et al. teach computer code for implementing a first response to the first control message if the reason information includes a first reason code (figure 12, column 6, lines 40-67, column 7, lines 1-60). Takama et al. do not disclose expressly computer code for implementing a second response to the control message if the reason information includes a second reason code. Mann et al. teach control messages including multiple flags (column 13, lines 1-17 and 53-61, column 15, lines 8-22, figure 6B, number 103, figures 6E and 6F), which a person of ordinary skill in the art could have used as "reason information". Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include more than one reason information on the control messages of Takama et al. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to send control messages including multiple parameters or flags over a data network and to use functions using multiple parameters to execute commands.

Regarding claim 25, the combination of Takama et al. and Mann et al. teach the limitations as set forth under claim 19 above. Furthermore, Mann et al. teach wherein the control message relates to an action to be performed at a network device receiving the control message (column 2, lines 61-68).

Regarding claim 26, Takama et al. teach a system for communicating between nodes in a network, the system comprising: means for receiving a first control message from a first node, the control message including explicit reason information relating to at least one reason for the generation of the first control message (figure 12, column 6, lines 40-67, column 7, lines 1-60); means for identifying the reason information (figure 12, column 6, lines 40-67, column 7, lines 1-60); means for determining an appropriate response to the first control message using at least said reason information (figure 12, column 6, lines 40-67, column 7, lines 1-60); and means for implementing said appropriate response (figure 12, column 6, lines 40-67, column 7, lines 1-60). Takama et al. do not expressly disclose communicating between nodes in a data network. However, Mann et al. teach communicating between nodes in a data network (columns 1-2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the method of Takama et al. in a data network. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to send control messages over a data network.

Regarding claim 31, the combination of Takama et al. and Mann et al. teach the limitations as set forth under claim 26 above. Furthermore, Takama et al. teach means for transmitting the first control message to the second network device to thereby cause the second network device to implement an appropriate action in response to the first control message (figure 12, column 6, lines 40-67, column 7, lines 1-60).

Regarding claim 32, the combination of Takama et al. and Mann et al. teach the limitations as set forth under claim 26 above. Furthermore, Takama et al. teach means

for implementing a first response to the first control message if the reason information includes a first reason code (figure 12, column 6, lines 40-67, column 7, lines 1-60). Takama et al. do not disclose expressly means for implementing a second response to the control message if the reason information includes a second reason code. Mann et al. teach control messages including multiple flags (column 13, lines 1-17 and 53-61, column 15, lines 8-22, figure 6B, number 103, figures 6E and 6F) that a person of ordinary skill in the art could have used as "reason information". Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include more than one reason information on the control messages of Takama et al. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to send control messages including multiple parameters or flags over a data network and to use functions using multiple parameters to execute commands.

Regarding claim 33, the combination of Takama et al. and Mann et al. teach the limitations as set forth under claim 26 above. Furthermore, Mann et al. teach wherein the control message relates to an action to be performed at a network device receiving the control message (column 2, lines 61-68).

Regarding claim 40, Takama et al. teach a system for communicating between nodes in a network, the system comprising: at least one CPU (column 1); memory (column 1); and at least one interface for communicating with at least one network device (column 1); the system being configured or designed to receive a first control message from a first node, the control message including explicit reason information

relating to at least one reason for the generation of the first control message (figure 12, column 6, lines 40-67, column 7, lines 1-60); the system being further configured or designed to identify the reason information (figure 12, column 6, lines 40-67, column 7, lines 1-60); the system being further configured or desired to determine an appropriate response to the first control message using at least said reason information (figure 12, column 6, lines 40-67, column 7, lines 1-60); and the system being further configured or desired to implement said appropriate response (figure 12, column 6, lines 40-67, column 7, lines 1-60). Takama et al. do not expressly disclose communicating between nodes in a data network. However, Mann et al. teach communicating between nodes in a data network (columns 1-2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the method of Takama et al. in a data network. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to send control messages over a data network.

Regarding claim 45, the combination of Takama et al. and Mann et al. teach the limitations as set forth under claim 40 above. Furthermore, Takama et al. teach the system being further configured or designed to implement a first response to the first control message if the reason information includes a first reason code (figure 12, column 6, lines 40-67, column 7, lines 1-60). Takama et al. do not disclose expressly the system being further configured or designed to implement a second response to the control message if the reason information includes a second reason code. Mann et al. teach control messages including multiple flags (column 13, lines 1-17 and 53-61, column 15, lines 8-22, figure 6B, number 103, figures 6E and 6F) which a person of

ordinary skill in the art could have used as "reason information". Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include more than one reason information on the control messages of Takama et al. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to send control messages including multiple parameters or flags over a data network and to use functions using multiple parameters to execute commands.

5. Claims 2-4, 8-10, 15-17, 20-22, 27-29, 35-37, and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mann et al. and Takama et al. as applied to claim 1, 7, 14, 19, 26, 34 above, and further in view of Troxel et al. (US Patent Application Publication Number: 2002/0075807).

Regarding claims 2-4, 8-10, 15-17, 20-22, 27-29, 35-37, and 41-43, the combination of Mann et al. and Takama et al. does not disclose expressly that the Internet Key Exchange Protocol (IKE), the Security Architecture for the Internet Protocol (IP Security), or the Internet Security Association and Key Management Protocol (ISAKMP) may be used. Troxel et al. teach sending messages between nodes in a network using IPSec protocols (RFC 2401), Internet Key Exchange Protocol (RFC 2409), and Internet Security Association and Key Management Protocol (RFC 2408) (page 5, column 2, paragraph 0070). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use these three protocols to send messages between nodes in a communications network. One of

ordinary skill in the art would have been motivated to do so because it was well known in the art to send messages according to these security protocols.

6. Claims 5, 11, 18, 23, 30, 38, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mann et al. and Takama et al. as applied to claims 1, 7, 14, 19, 26, 34, and 40 above respectively, and further in view of Leung (US Patent Number: 6,760,444).

Regarding claims 5, 11, 18, 23, 30, 38, and 44, the combination of Mann et al. and Takama et al. does not disclose expressly that the message may be used to modify a security association. However, Leung teaches using packets (messages) for configuration, modification, and retrieval of security associations (column 5, lines 5-15 and 30-35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify security associations using a message. One of ordinary skill in the art would have been motivated to do so because it was well known in the art to reduce the administrative support required to configure and modify the security associations (Leung, columns 3-5).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Application Publication Number: 2002/0133727, filed March 15, 2001, inventors: Dervin et al., title: Automated Node Restart in Clustered Computer System. Dervin et al. teach including reason for action in a message (paragraphs 40-50). It would have been obvious at the time the invention was made to combine the teachings of Dervin et al. with the system of Mann et al. to customize the system.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-

5861. The examiner can normally be reached on Monday-Friday 7:00 am - 5:00 pm, off on Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DGC

EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER